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EXAMINER

PEDDER, DENNIS H

ART UNIT	PAPER NUMBER
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3612

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/715,002
Filing Date: November 17, 2003
Appellant(s): EVANS, DARIN

MAILED

APR 26 2005

GROUP 3600

Marcus P. Dolce
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 11, 2005.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Claimed Subject Matter*

The summary of invention contained in the brief is correct.

(6) *Grounds of rejection to be Reviewed on Appeal*

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

Claim 27 is no longer rejected under 35 USC 112, second paragraph.

(7) *Claims Appendix*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) *Evidence Relied Upon*

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

GB 2,081,653	Scrivo	2-1982	This is referred to by applicant as "the UK patent application"
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5,092,512	Sturru et al.	3-1992	
JA 0172848	Hamaya	10-1982	This is referred to by applicant as "the Japanese 848 application"
5,799,991	Glance	9-1998	

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-21, 28-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Note firstly that several 35 USC 112, second paragraph rejections, argued in the brief, are no longer maintained for appeal. These are:

Claim 9 as argued on page 9, second full paragraph, as regards the terms "top and bottom front walls" only;

Claim 14 as argued on page 9, but which continues to be rejected in its dependency on claim 9;

Claim 15 as argued on page 9 as regards the term "nose sections" only, the balance of the rejection continues and is fully discussed above;

Claim 16 as argued on page 11;

Claims 27-31 as argued on page 11.

Recitation of “collapsible with a parallelogram motion” is deemed to be indefinite under this statute. Claims 7, 9, 15, 16, 21 are all deemed to be incorrect as there is no parallelogram motion disclosed. The definition of “parallelogram” is well defined in the English language as “a quadrilateral having both pairs of opposite sides parallel to each other” *Random House College Dictionary, 1980*. Applicant cannot use this term with a unique definition, as this attempt to so do is contrary to the conventional usage of the term. As such, appellant’s use of the MPEP 2173.01 to booster his argument, is deemed to destroy the logic as appellant is using the word “parallelogram” in a way that is contrary to the accepted meaning in the art. The nose portions deflect upwardly and downwardly at their left edges respectively when an object of the matching size impacts the space inbetween and the right edge, fastened to the beam, does not move, precluding the recited motion. There is no right wall of the absorber to qualify as parallel in movement of the left and right edges of the front wall and the beam cannot meet these limitations as the beam is not parallel to the front wall of the absorber. Applicant’s remarks are inconsistent with the disclosure and illogical.

Claim 15 is also not disclosed, as there is no throwing force, merely a force resolution 31, 31’ as disclosed for figure 4. Further, inasmuch as the force 31’ is restricted from moving the person downward because of the ground beneath, and due to the majority of the weight of the person being above the knee, the impact would direct the body of the person into the automobile, not upwardly. In greater detail for applicant’s

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apparently necessary edification, no structural distinction is disclosed for the upper and lower horizontal sections. As a result, the force resolutions 31 and 31' are necessarily equal. Force 31 is therefore counteracted by force 31' and no throwing force is resultant. There is necessarily a pushing force component which would push the knee to the left in figure 4 and result in the above mentioned torso movement toward the automobile. Appellant's argument in this regard apparently confuses the movement of a pedestrian struck by this vehicle at a corner region (see paragraph 24, the subject of which has already had a patent issued, US 6,685,243) with the subject of this patent where no movement perpendicular is deemed resultant from the disclosed bumper absorber.

Claim 21 lacks a clear frame of reference for "longer than the front wall". Since this term could be measured either longitudinally or laterally to the vehicle, the term is deemed indefinite and easily correctible but not done to date.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-8, 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by

Scrivo.

Scrivo has top and bottom sections 34 with top, upper mid-wall, upper front wall, bottom wall, lower-mid wall, and lower front wall with nose portions that extend forward

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of the middle section at 32 with a mid-front wall connecting the upper-mid wall and lower-mid wall as seen in figure 2 and a middle section at the space therebetween. The top and bottom sections extend forward of the mid-front wall and define a channel at the space therebetween. Impact with an object of the shape of a knee would *inherently* shift the nose portions upwardly and downwardly as claimed. Appellant might note that the structure of Scrivo at the point of impact is identical to that of the invention, hence the inherent movement as claimed. In addition, a second level of absorption is offered by the sections backing up the nose portions at 32 and in front of the beam, being crushed to provide increased energy absorption. Appellant should reexamine the claims and note that a low level impact absorption is inherent in the reduced section of the Scrivo reference at point of impact due to the reduced cross section of elements 34 relative to element 32. The greater cross section of the latter inherently results in increased energy absorption. Further, even for a hypothetical rectangular absorber, the overly broad claim limitations are met as energy absorption increases with increased impact stroke.

As to claims 5-6, see middle location of recess and ridge at 24 of Scrivo.

As to claims 7-8, a small cross section of an impacting object, such as a knee of a pedestrian, impacting between the sections 34 of Scrivo would shift the sections upwardly and downwardly in wedge like manner with vertical force components.

As to claim 16, the nose portions of Scrivo have upper and lower walls, a front wall and an angled front at the intersection of the front and lower wall. The front wall has curved upper and lower sections to form a non-planar front surface.

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As to claim 19, see stabilizing wall at 32 in fig. 2 and in the walls of the channel for rivet 52 in figure 4.

As to claim 20, see fascia 42. The fascia would tend to cause the claimed motion for a knee that is of lesser vertical height than the space between the nose portions.

As to claim 21, Scrivo has a front wall of length between upper and lower walls that is less than the length of the upper and lower walls. In addition, for knees of lesser vertical height than the absorber, the function is inherent in a resilient absorber as disclosed by Scrivo.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo in view of Sturrus et al., US 5,092,512.

The rejection in view of Scrivo above is incorporated by reference. It would have been obvious to one of ordinary skill to provide in Scrivo a bumper beam with an aerodynamic sweep as taught by Sturrus et al. in order to reduce wind resistance and increase fuel economy, knowledge generally available to one of ordinary skill in the art.

As to claim 11, the beam is approximately this ratio, the exact ratio being an obvious expedient balancing weight against protection.

As to claim 12, process steps are not given patentable weight in a product claim, but Sturrus et al. incidentally discloses roll forming.

As to claim 13, see recesses and ridges in figure 2 of Scrivo at the rear of the absorber at 24, for example.

As to claim 14, Scrivo has a ridge at top, bottom and mid sections.

Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Scrivo.

Process steps are not given patentable weight in a product claim (MPEP 2113).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo.

The size of the beam is an obvious expedient to one of ordinary skill in the art, hardly a patentable distinction as a larger beam is more effective against diverse impact geometries and a smaller beam saves weight. This is an engineering tradeoff.

Claims 2, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo or Scrivo in view of Sturrus et al. as applied to claims 1 and 9 above, and further in view of Hamaya.

It would have been obvious to one of ordinary skill to provide in the references above wavy top and bottom walls as taught by Hamaya in order to add additional protection for pedestrians upon impact to those locations. Applicant should note that the wavy top wall of Hamaya added to the absorber of Scrivo adds additional energy absorbing structure, enhancing the function of the absorber.

Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo or Scrivo in view of Sturrus et al. in view of Glance.

Scrivo does not detail the material of the absorber. Glance teaches that a bumper absorber may be manufactured of foam material. Foam inherently contains hollow areas throughout. It would have been obvious to one of ordinary skill to provide in Scrivo alone or as modified by Sturris et al. a foam absorber material as taught by Glance in order to use an absorber commercially available with known properties.

(10) Response to Argument

Appellant's remaining arguments are responded to in order:

Page 13, Claims 7-8, appellant's arguments are deemed to be inconsistent with both the disclosure, common sense, and appellant's already issued patent US 6,609,740, wherein a similarly shaped bumper with projecting nose portions exhibits linear collapse when struck, and no shifting of the nose portions. Impact with an object such as a knee is deemed essential for the claimed movement to occur.

The remainder of the arguments of appellant's section B. are cumulative to the argument regarding "parallelogram motion" believed to be fully responded to above.

The majority of the argument relating to claims 9, 11-14 is also cumulative as appellant has made no attempt to rebut the presentation of the reference to Sturris et al. This is not surprising since the Sturris et al. reference is assigned to Shape Corporation, an assignment shared with many of appellant's already issued bumper patents. However the argument that the Scrivo patent design would not direct a horizontal impact force vertically is frankly incredible, given the very similar boundary parameters of Scrivo and appellant. This argument fails to clarify how it is that such similar designs would not produce similar results.

Regarding claims 2 and 10, appellant's argument that the teaching or suggestion to make a claimed combination must be found in the prior art is self-serving. As appellant should clearly know, the full text of this quote from the court contains the further statement or knowledge generally available to one of ordinary skill. "To properly combine references A and B to reach the conclusion that the subject matter of a patent would have been obvious, case law requires that there must have been some teaching, suggestion, or inference in either reference A or B, or both, *or knowledge generally available to one of ordinary skill in the relevant art*, which would have led one skilled in the art to combine the relevant teachings of references A and B. See, e.g., ACS Hospital Systems, 732 F.2d at 1577, 221 USPQ at 993; W.L. Gore, 721 F.2d at 1551, 220 USPQ at 311; In re Sernaker, 702 F.2d 989, 994, 217 USPQ 1, 5 (Fed. Cir. 1983)". Quoted from Ashland Oil v. Delta Resins & Refractories, Inc. 227 USPQ 657, 667 (CAFC 10/25/1985). The patent literature was not intended to be an encyclopedia, but an outline of the invention. Regarding argument as to lack of suggestion, see the statement above regarding increased protection for pedestrians, knowledge generally available. Regarding the argument that the Japanese document lacks wavy top and bottom walls, see figure 2.

As to the argument that foam as taught by Glance would be "many orders of magnitude less efficient" than that of Scrivo, this is baseless speculation by appellant. Foam material may be constructed of many diverse components and strengths also knowledge generally available.

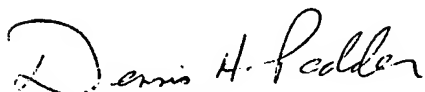
As to claim 24, no bodily incorporation of the structure of Glance was set forth in the rejection, merely a teaching of material.

Remaining arguments are deemed to be cumulative.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Dennis H. Pedder

Expert Primary Examiner

AU 3612

Conferees:

LM LDM

PLE 